

From Ocean Simulations to Ocean Stories: Your Role in Ocean Literacy

UNESCO-IOC Ocean Literacy Team | UNESCO-IOC/ODC
Training Course on Ocean Dynamics and Ocean Models



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OCEAN LITERACY 101



“UNDERSTANDING OF THE OCEAN’S INFLUENCE ON YOU AND YOUR INFLUENCE ON THE OCEAN”

The ocean literate person:

1. understands the fundamental concepts about the functioning of the ocean;
2. can communicate about the ocean in a meaningful way;
3. and is able to make informed and responsible decisions regarding the ocean and its resources.

(Cava et al., 2005)



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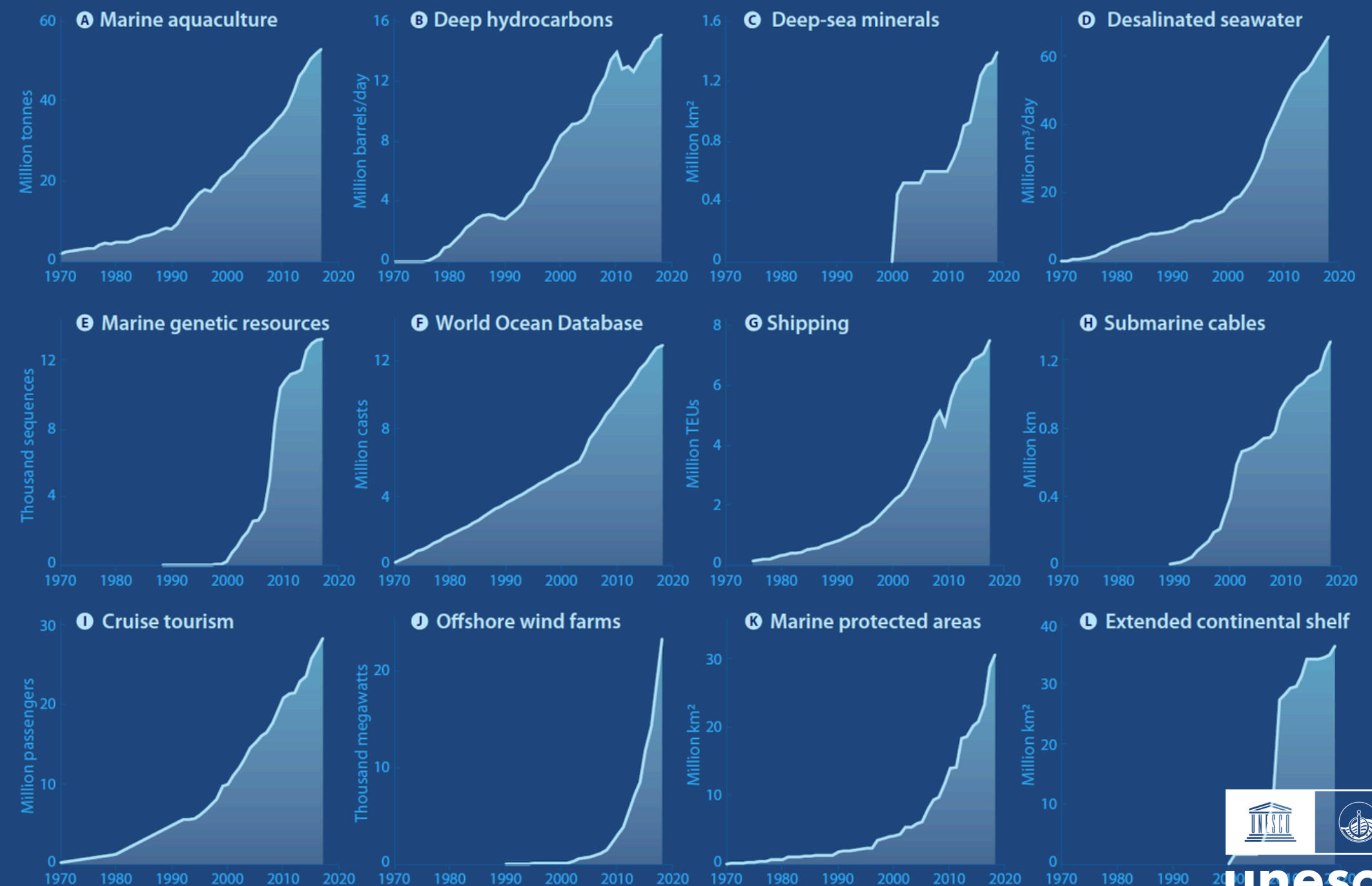
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In the last 50 years, there has been rapid growth in new ocean industries such as mariculture, deep ocean drilling for hydrocarbons and minerals, desalinisation and offshore wind farms. Existing maritime communications, transport and tourism industries have expanded rapidly, as have the territorial claims and information needs around the ocean. Together, these have been described as a ‘blue acceleration’ (Jouffray et al. 2020). The impacts of this economic growth on ocean-dependent people and economies have not yet been assessed.



(Allison et al., 2020)

OL PRINCIPLES

Seven essential principles that can be adapted to any context. Not a memorization test, but a set of communication anchors.



1

Earth has one big ocean with many features



2

The ocean and life in the ocean shape the features of the Earth



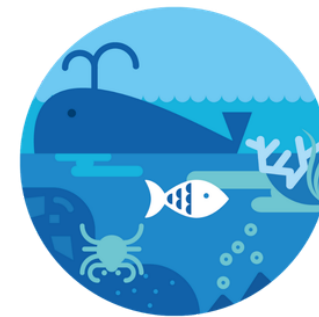
3

The ocean is a major influence on weather and climate



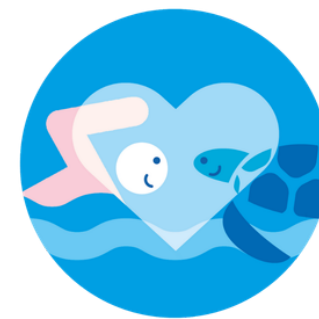
4

The ocean makes Earth habitable



5

The ocean supports a great diversity of life and ecosystems



6

The ocean and humans are inextricably interconnected



7

The ocean is largely unexplored

NOT SO SIMPLE →



(McKinley et al., 2023)

OCEAN LITERACY HAS EVOLVED FAR BEYOND SIMPLY TEACHING PEOPLE FACTS.

For a long time, the go-to approach was simple: if we just teach people more facts about the ocean, they will automatically start protecting it, but that is not true. Ocean literacy is way more complex, and we need to move past a "one-size-fits-all" approach to saving our seas.

To create real change, we have to look at the whole picture of how humans connect with the Ocean. This means looking at new angles like "emoceans" (how our emotions and memories drive us to care), who actually has access to nature, and whether communities trust the environmental information they are getting.

Crucially, we need to listen to local and Indigenous knowledge, bring big businesses into the conversation, and make sure we aren't just pointing out problems, but actively highlighting solutions.

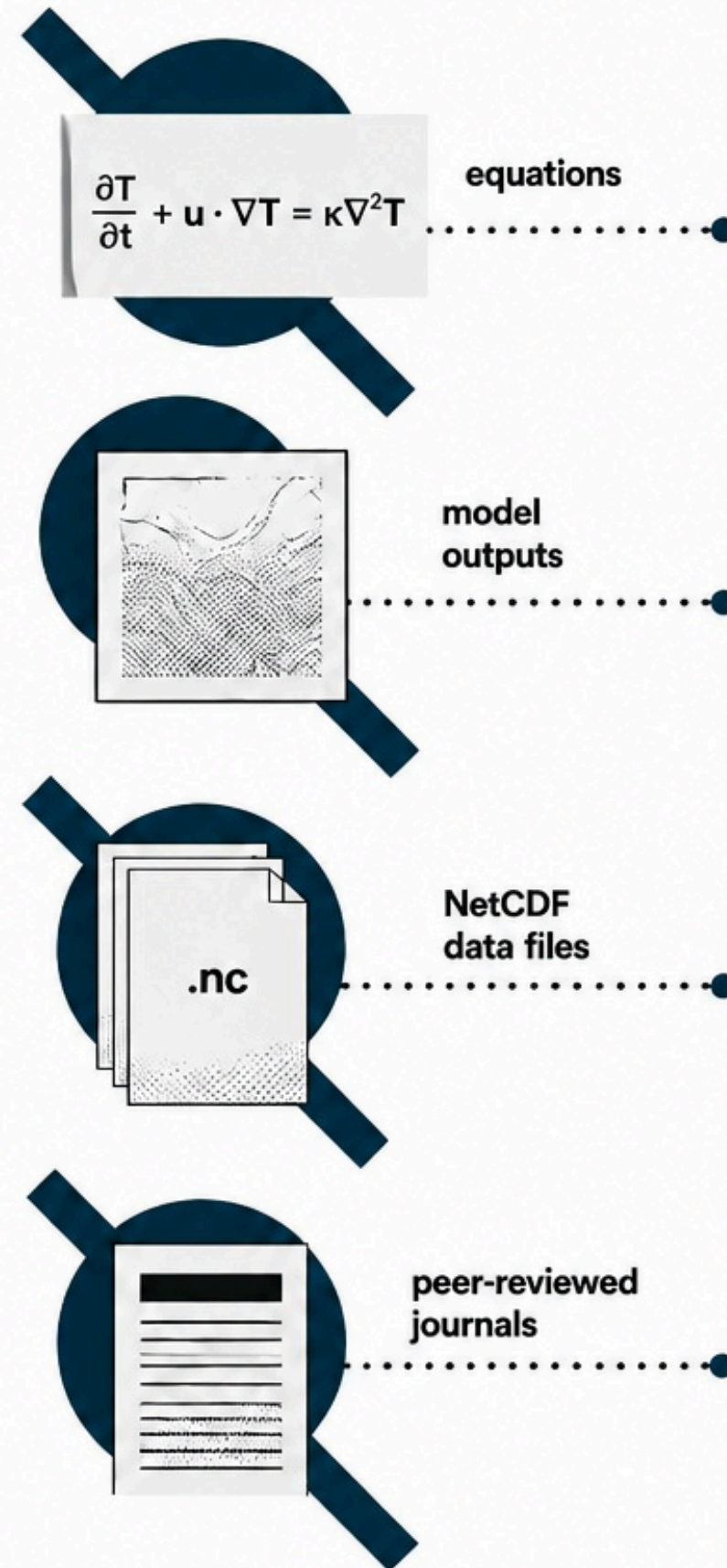
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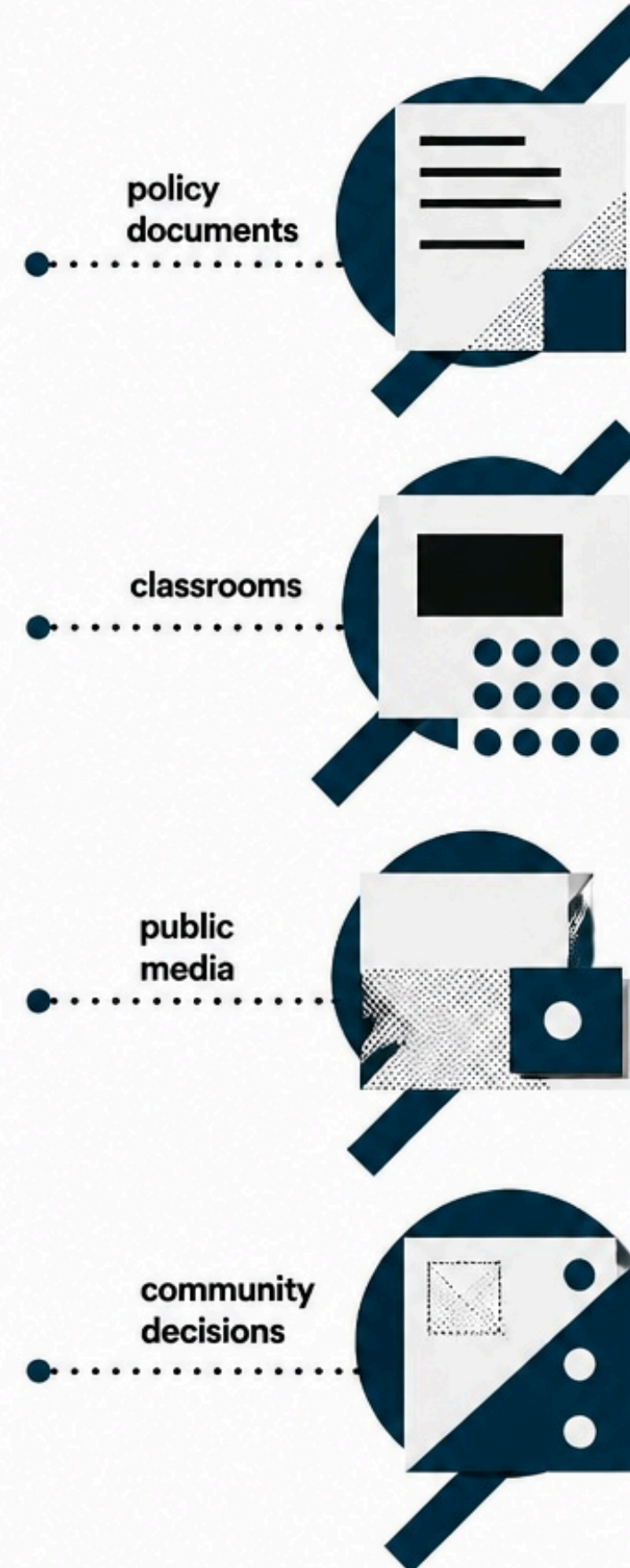
**DONE WITH DIFFERENT
ACTORS**

**DONE FOR DIFFERENT
ACTORS**

Ocean Science



Society

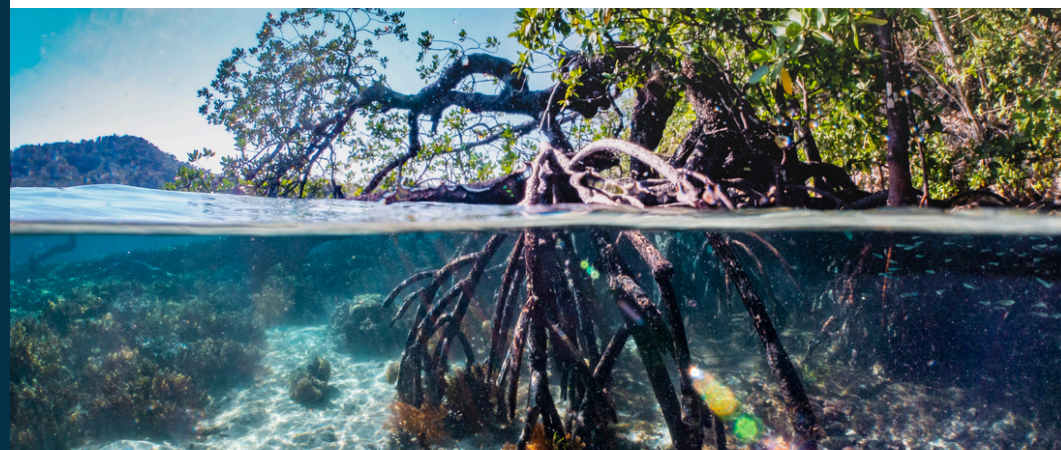


WHY THE GAP MATTERS TO YOU?



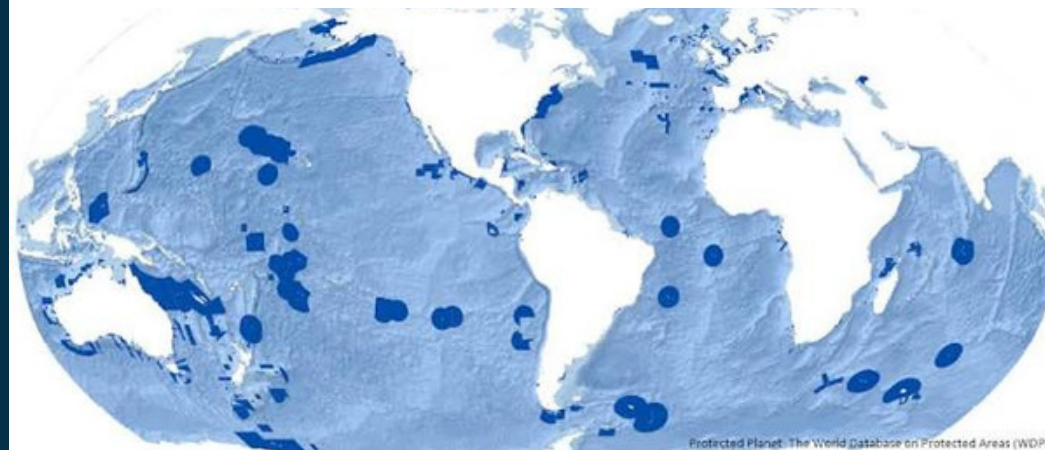
Funding

Grant panels increasingly reward demonstrated societal relevance, not just technical novelty.



Policy

Policy only acts on what it understands. Unclear science rarely becomes action.



Trust

Public trust in science isn't a given. It's built and earned one conversation at a time.



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MULTIPLE WAYS IN

TRANSLATE

Turn models and data into narratives people can actually act on, a plain-language summary alongside your next dataset

CONTRIBUTE

Plug your expertise into citizen science and education initiatives already looking for scientific input.

INFORM

Shape policy-relevant communication as briefs, testimonies, or simply a clear conversation with a decision-maker.

MENTOR

Engage with schools, youth programs, and early-career networks. One guest session can shift a classroom.

TAKE ACTION



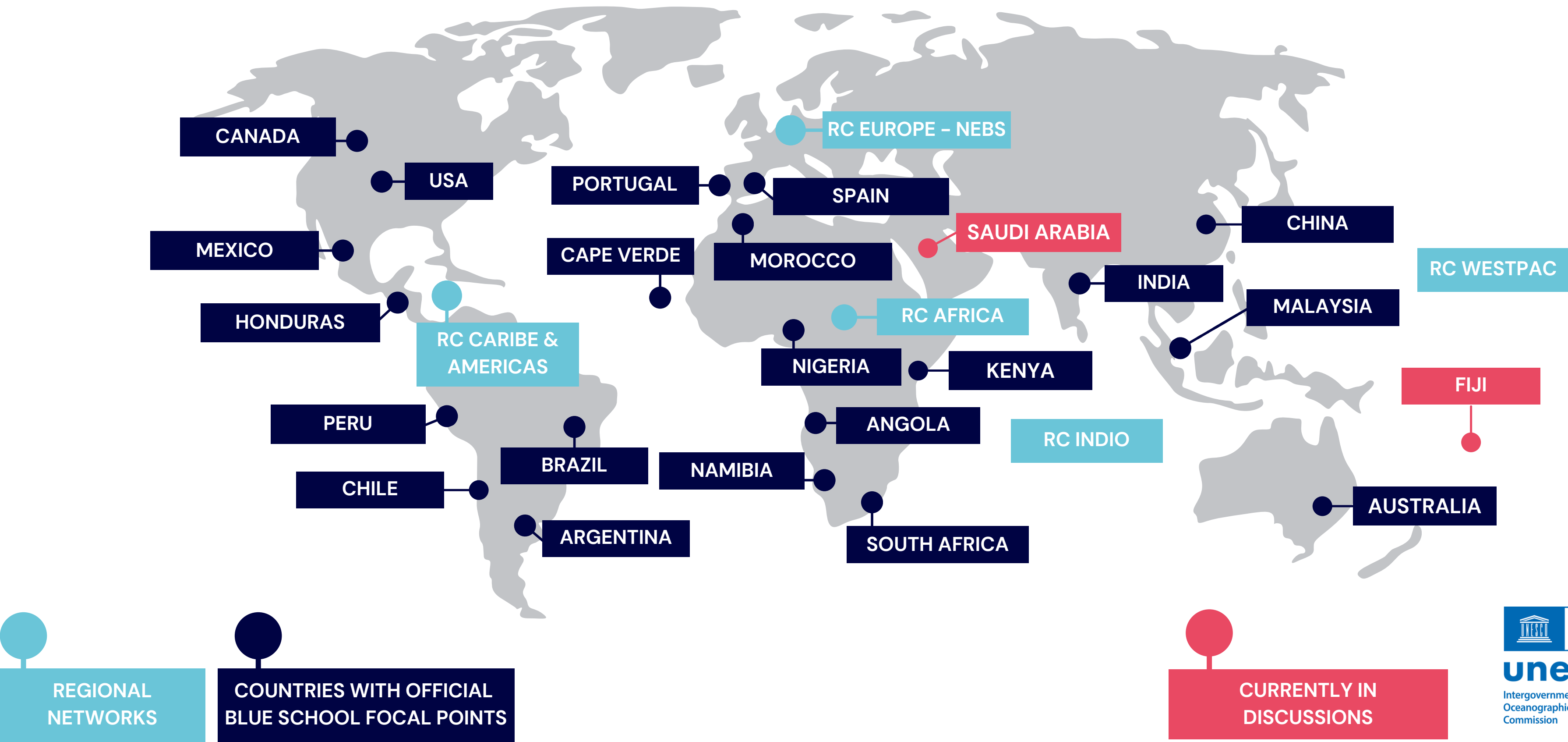
OUR WORK



BLUE SCHOOLS



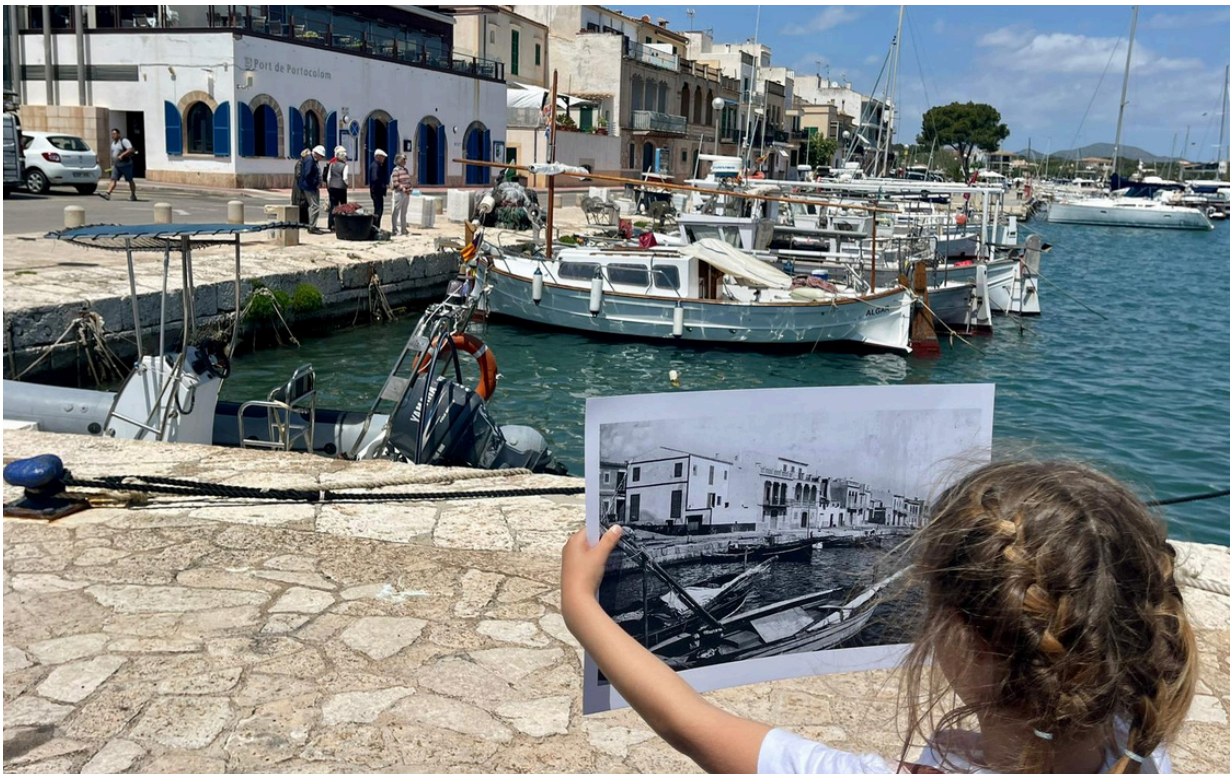
Blue School
Global Network



BLUE SCHOOLS



Blue School
Global Network





The Ocean Literacy Portal

Transforming ocean knowledge into action

SHIFT THE MINDSET!

See Ocean Literacy as a lens on the work you already do, not a separate effort:

- Stay Connected
- Take Action
- Share your work to inspire

CONTACTS

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